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1. A method of providing search results in response to an ambiguous search query, the ambiguous search query consisting of a sequence of ambiguous information components:

receiving a sequence of ambiguous information components from a user;

obtaining mapping information that maps the ambiguous information components to less ambiguous information components;

using the mapping information to translate the sequence of ambiguous information components into one or more corresponding sequences of less ambiguous information components;

providing one or more of the sequences of less ambiguous information as an input to a search engine;

- 2. The method of claim 1, wherein the mapping information is based on the configuration of a standard telephone keypad.
  - 3. The method of claim 2, wherein the ambiguous information components comprise numbers and the less ambiguous information components comprise letters.
  - 4. The method of claim 1, wherein each of the ambiguous information components comprises a single press of a key and the less ambiguous information comprises letters that correspond to the key.
  - 5. The method of claim 1, wherein the ambiguous information components comprise phonemes.
  - 6. The method of claim 5, wherein the less ambiguous information components comprise alphanumeric information.
- 7. The method of claim 1, wherein the ambiguous information components comprise visual information.
  - 8. The method of claim 1, wherein the act of using comprises using the mapping information in combination with a lexicon to translate the sequence of ambiguous information

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components into one or more corresponding sequences of less ambiguous information components.

- 9. The method of claim 8, wherein the lexicon is a dictionary.
- 10. The method of claim 8, wherein the lexicon is a list of sequences of less ambiguous information components that previously have been processed by the search engine.
- 11. The method of claim 1, wherein the act of providing comprises providing at least two sequences of less ambiguous information components to the search engine using a logical "OR" operation.
- 12. The method of claim 11, wherein the act of providing comprises:
- determining a subset of the translated sequences of less ambiguous information components; and

providing the subset of translated sequences of less ambiguous information components as an input to a search engine.

- 13. The method of claim 12, wherein the act of determining comprises comparing the translated sequences of less ambiguous information components against a lexicon.
  - 14. The method of claim 12, wherein the act of determining comprises comparing the translated sequences of less ambiguous information components against a search query log.
- The method of claim 12, wherein the act of determining comprises using statistical
   information about the co-occurrence of the less ambiguous information components within the sequence.

16. A method of providing search results in response to an ambiguous search query, comprising:

receiving a sequence of information components from a user, each information component corresponding to a key press;

obtaining mapping information that maps the information components to other information components corresponding to the same key press;

using the mapping information to determine other sequences of information components;

providing one or more of the received sequence and the other sequences as an input to a search engine;

- 17. The method of claim 16, wherein the mapping information is based on the configuration of a standard telephone keypad.
- 15 18. The method of claim 17, wherein the received information components comprise numbers and the other information components comprise letters.
  - 19. The method of claim 17, wherein both the received and other information components comprise letters.
- 20. The method of claim 16, wherein the act of providing comprises providing at least20 two sequences to the search engine using a logical "OR" operations.

21. A method of providing search results to a user in response to an ambiguous search query, comprising:

receiving a string of numbers;

translating the string of numbers into a plurality of letter strings based on mapping information;

providing at least one of the letter strings as a search query to a search engine; obtaining search results from the search engine in response to the search query; and presenting the search results to a user.

- The method of claim 21, wherein the mapping information is based on a standardtelephone keypad.
  - 23. The method of claim 21, wherein the act of providing comprises providing at least two of the letter strings as a search query to a search engine using a logical "OR" operation.

24. A method of providing search results to a user in response to an ambiguous search query, comprising:

receiving a number word;

translating the number word into one or more letter words based on mapping 5 information;

providing at least one of the letter words as a search query to a search engine; obtaining search results from the search engine in response to the search query; and providing the search results to a user.

The method of claim 24, wherein the providing step comprises providing a plurality of
 the letter words as a search query to a search engine using a logical "OR" operation.

26. A method of providing search results to a user in response to an ambiguous search query, comprising:

receiving at least two number words constituting a number phrase;

translating each number word into one or more letter words based on mapping information;

forming one or more letter phrases that correspond to the number phrase; providing at least one of the letter phrases as a search query to a search engine; obtaining search results from the search engine in response to the search query; and providing the search results to a user.

- 10 27. The method of claim 26, wherein the providing step comprises providing at least two of the letter phrases as a search query to a search engine using a logical "OR" operation.
  - 28. The method of claim 26, wherein the mapping information is based on a standard telephone keypad.

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29. A method of providing search results in response to an ambiguous search query received from a client device, the ambiguous search query consisting of a sequence of ambiguous information components:

receiving at a server device a sequence of ambiguous information components from 5 a client device;

obtaining at the server device mapping information that maps the ambiguous information components to less ambiguous information components;

using the mapping information in combination with a dictionary to translate, at the server device, the sequence of ambiguous information components into one or more corresponding sequences of less ambiguous information components.

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30. A computer-readable medium containing one or more instructions for providing search results in response to an ambiguous search query, the ambiguous search query consisting of a sequence of ambiguous information components, the instructions comprising:

receiving a sequence of ambiguous information components from a user;

obtaining mapping information that maps the ambiguous information components to less ambiguous information components;

using the mapping information to translate the sequence of ambiguous information components into one or more corresponding sequences of less ambiguous information components;

providing one or more of the sequences of less ambiguous information as an input to a search engine;

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31. An apparatus for providing search results in response to an ambiguous search query, the ambiguous search query consisting of a sequence of ambiguous information components, comprising:

at least one memory having program instructions, and

at least one processor configured to execute the program instructions to perform the operations of:

receiving a sequence of ambiguous information components from a user;
obtaining mapping information that maps the ambiguous information
components to less ambiguous information components;

using the mapping information to translate the sequence of ambiguous information components into one or more corresponding sequences of less ambiguous information components;

providing one or more of the sequences of less ambiguous information as an input to a search engine;

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32. An apparatus for providing search results in response to an ambiguous search query, the ambiguous search query consisting of a sequence of ambiguous information components, comprising:

means for receiving a sequence of ambiguous information components from a user;
means for obtaining mapping information that maps the ambiguous information
components to less ambiguous information components;

means for using the mapping information to translate the sequence of ambiguous information components into one or more corresponding sequences of less ambiguous information components;

means for providing one or more of the sequences of less ambiguous information as an input to a search engine;